IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellants : Yasushi Takahashi, et al.

Serial No. : 09/869.254

Filed : June 26, 2001

For : VIDEO INFORMATION EDITING METHOD AND

EDITING DEVICE

Examiner : Vu, Thanh T.

Art Unit : 2174

Confirmation No. : 2265

745 Fifth Avenue New York, NY 10151



REPLY BRIEF UNDER 37 C.F.R. § 41.41 AND PETITION FOR EXTENSION OF TIME

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

Sir:

In response to the Examiner's Answer dated April 4, 2008, Applicants hereby petition for a one-month extension-of-time, extending the period for response to July 7, 2008 (July 4, 2008 being a federal holiday and July 5, 2008 being a Saturday). Applicants submit an electronic payment of \$120.00 as payment of the extension-of-time fee. Appellants submit herewith a Reply Brief. This Reply Brief is a replacement brief and responds to the Examiner's Answer.

-1- 00554518

1. REAL PARTY IN INTEREST

The real party in interest is Sony Corporation, a Japanese corporation with offices at 7-35 Kitashinagawa 6-Chome, Shinagawa-Ku, Tokyo to which appellants have assigned all interest in, to and under this application, by virtue of an assignment recorded on June 26, 2001 at reel 012056, frame 0052 of the assignment records of the Patent and Trademark Office.

2. RELATED APPEALS AND INTERFERENCES

Upon information and belief, the undersigned attorney does not believe that there is any appeal or interference that will directly affect, be directly affected by or have a bearing on the Board's decision in the pending appeal.

3. STATUS OF THE CLAIMS

The Application was filed with claims 1-64 on June 26, 2001, and assigned Application Serial No. 09/869,254. The Application claims priority benefits based on PCT Application PCT/JP99/07419, which was filed December 28, 1999, which in turn claims foreign priority benefits under 35 U.S.C. §119 based on Japanese application 10-373855 (filed on December 28, 1998).

A Preliminary Amendment was filed on June 26, 2001, amending claim 2.

In a first Office Action dated October 12, 2005, the Examiner rejected claims 3, 4, 11, 12, 19, 20, 27, 35, 36, 43, 51, 52 and 59 under 35 U.S.C. §112 and claims 1-64 were rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent No. 5.917.990 to Zamara et al.

In response to this first Office Action, Appellants filed an Amendment on October 8, 2004 canceling claims 2-8, 10-32; amending claims 1, 9, 33, 35, 36, 41, 43, 44, 49, 51, 52, 57, 59 and 60; adding new claims 65-76 and arguing against the rejections.

The Examiner then issued a Final Office Action dated March 22, 2005, rejecting claims 1, 9, 33, 41-48, 57, 65, 66 and 76. Claims 1, 9 and 33-64 were rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent No. 5,917,990 to Zamara et al., claims 65-66, and 74-76 were rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent No. 6,738,100 to Hampapur, et al., claim 67 was rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,452,875 to Lee et al., and claim 69-73 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,738,100 to Hampapur, et al. in view of U.S. Patent No. 5,917,990 to Zamara et al.

In response to this Final Office Action, Appellants filed an Amendment under Rule 116 on July 22, 2005 with Request for Continued Examination, canceling claims 34-40, 49-56, 58-64, 67-75, amending claims 1, 9, 33, 41, 57, 65, 66 and 76 and arguing against the rejections.

In an Office Action dated October 12, 2005, the Examiner objected to claim 64 and claims 1 and 33 were rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent No. 5,917,990 to Zamara et al. Claims 9, 41-48, and 57 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 5,917,990 to Zamara, et al. in view of U.S. Patent No. 5,995,095 to Ratakonda and claims 65, 66, and 76 were rejected under 35 U.S.C.

§103(a) as allegedly unpatentable over U.S. Patent No. 6,738,100 to Hampapur, et al. in view of U.S. Patent No. 5,995,095 to Ratakonda.

In response to this Office Action, Appellants filed an Amendment on January 11, 2006 amending claims 1 and 33 and arguing against the rejections.

The Examiner then issued a Final Office Action dated April 7, 2006, rejecting claims 1, 9, 33, 41-48, 57, 65, 66 and 76. In that, claims 1 and 33 were rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent No. 5,917,990 to Zamara et al., claims 9, 41-48, and 57 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 5,917,990 to Zamara, et al. in view of U.S. Patent No. 5,995,095 to Ratakonda and claims 65, 66, and 76 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,738,100 to Hampapur, et al. in view of U.S. Patent No. 5,995,095 to Ratakonda.

In response to this Final Office Action, Appellants filed an Amendment under Rule 116 on June 7, 2006, simply arguing against the rejections.

The Examiner issued an Advisory Action dated July 14, 2006, indicating the arguments were considered but did not overcome the rejection. The Examiner maintained the rejection of claims 1, 9, 33, 41-48, 57, 65, 66 and 76.

A Notice of Appeal was filed by Appellants on August 14, 2006 appealing the final rejection of these claims. This Appeal Brief is being filed pursuant to this Notice of Appeal.

Accordingly, the status of the claims is summarized as follows:

Claims allowed: none
Claims objected to: none

Claims rejected: 1, 9, 33, 41-48, 57, 65, 66 and 76

The rejected claims 1, 9, 33, 41-48, 57, 65, 66 and 76 are set forth in the Appendix attached hereto. Appellants are appealing the Final Rejection of claims 1, 9, 33, 41-48, 57, 65, 66 and 76, which constitute all of the currently pending claims in this application.

4. STATUS OF THE AMENDMENTS

Appellant believes that all the submitted Amendments have been entered.

5. SUMMARY OF THE CLAIMED SUBJECT MATTER

The citations to Figures and/or Specification locations are provided immediately following the elements of the independent claims, which are summarized below. Such citations, however, are provided merely as examples and are not intended to limit the interpretation of the claims or to evidence or create any estoppel. Support for each of these claims can be found throughout the specification as originally filed.

Claim 1, is directed to a video information editing method comprising the steps of delimiting at timing of a delimiting instruction a regular edition video, constituted by continuous dynamic images recorded along with recording position information or time lapse information, into shots as units of dynamic images or into scenes each containing at least one shot with the recording position information or the time lapse information associated with the shots or scenes (Page 46, line 3-page 47, line 19, Figs. 13 and 14). An evaluation value is prepared of each of the shots or each of the scenes on the basis of the information provided corresponding to each of the shots or each of the scenes (Page 48, lines 2-15, Fig. 15), wherein the information provided includes semantic evaluation information (Page 11, lines 6-11), and wherein the information provided includes information relating to a presence/absence of a single or a plurality of video

-5- 00554518

characteristic items (Page 11, lines 14-18); and selecting from the regular edition video the shots or the scenes such that each of the evaluation values of the shots or the scenes satisfies a predetermined condition (Page 49, line 4-Page 50, line 6, Fig. 17).

Claim 9 is directed to a video information editing method comprising the steps of delimiting at timing of a delimiting instruction a regular edition video, constituted by continuous dynamic images recorded along with recording position information or time lapse information, into shots as units of dynamic images and into scenes each containing at least one shot with the recording position information or the time lapse information associated with the shots or scenes (Page 46, line 3-page 47, line 19, Figs, 13 and 14). A semantic evaluation value is prepared of each of the scenes on the basis of the information provided corresponding to each of the scenes (Page 48, lines 2-9); selecting from the regular edition video the scenes such that each of the semantic evaluation values of the scenes satisfies a predetermined first condition (Page 49, line 4-Page 50, line 6, Fig. 17). An evaluation value is prepared of at least one of the shots included in each of the selected scenes on the basis of the information provided corresponding to a single or a plurality of video characteristic items of the shots (Page 50, lines 1-6). The shots are selected such that each of the evaluation values of the shots satisfies a predetermined second condition (Page 52, line15-Page 53, line 15), wherein the first and second condition are set in accordance with a type of preview, the type of preview being selected from a plurality of types of previews, which are set for different purposes (Page 63, lines 4-8).

Claim 33 is directed to a video information editing device (Figure 11) comprising means for delimiting at timing of a delimiting instruction a regular edition video (Fig. 11), constituted by continuous dynamic images recorded along with recording position information or time lapse information (Ip1, Prg11, Fig. 11), into shots as units of dynamic images or into scenes each

containing at least one shot with the recording position information or the time lapse information associated with the shots or scenes (Page 46, line 3-page 47, line 19, Figs. 13 and 14). Also included are means for preparing an evaluation value of each of the shots or each of the scenes on the basis of the information provided corresponding to each of the shots or each of the scenes (Ip2, Fig. 11; Ip6, Fig. 24), wherein the information provided includes semantic evaluation information (Page 48, lines 2-15, Fig. 15), and wherein the information provided includes information relating to a presence/absence of a single or a plurality of video characteristic items (Page 11, lines 14-18); and means for selecting from the regular edition video the shots or the scenes such that each of the evaluation values of the shots or the scenes satisfies a predetermined condition (Prg 5 and Prg 6 in Figure 11, Page 49, line 4-Page 50, line 6, and Fig. 17).

Claim 41 is directed to a video information editing device (Figure 11) comprising means for delimiting at timing of a delimiting instruction a regular edition video (Sg; Fig. 11), constituted by continuous dynamic images recorded along with recording position information or time lapse information (Ip1, Prg11, Fig. 11), into shots as units of dynamic images and into scenes each containing at least one shot with the recording position information or the time lapse information associated with the shots or scenes (Page 46, line 3-page 47, line 19, Figs. 13 and 14). Also included are means for preparing a semantic evaluation value of each of the scenes on the basis of the information provided corresponding to each of the scenes (Ip2, Fig. 11; Ip6, Fig. 24); means for selecting from the regular edition video (Sg, Fig. 11) the scenes such that each of the semantic evaluation values of the scenes satisfies a predetermined first condition (Page 49, line 4-Page 50, line 6, Fig. 17); means for preparing an evaluation value of at least one of the shots included in each of the selected scenes on the basis of the information provided corresponding to a single or a plurality of video characteristic items of the shots (Tab 6 of Figure

11, Page 50, lines 1-6); and means for selecting the shots such that each of the evaluation values of the shots satisfies a predetermined second condition (Prg 6 of Figure 11, Page 52, line15-Page 53, line 15), wherein the first and second conditions are set in accordance with a type of preview, the type of preview being selected from a plurality of types of previews, which are set for different purposes (Page 63, lines 4-8).

Claim 57 is directed to a video information editing device (Fig. 11) comprising means for delimiting at timing of a delimiting instruction a regular edition video (Ip 1, Prg11, Fig. 11), constituted by continuous dynamic images recorded along with recording position information or time lapse information, into shots as units of dynamic images and into scenes each containing at least one shot with the recording position information or the time lapse information associated with the shots or scenes (Page 46, line 3-page 47, line 19, Figs. 13 and 14); means for preparing a semantic evaluation value of each of the scenes on the basis of the information provided corresponding to each of the scenes (Tab 6 of Figure 11, Page 50, lines 1-6); means for selecting from the regular edition video the scenes such that each of the semantic evaluation values of the scenes satisfies a predetermined first condition (Page 49, line 4-Page 50, line 6, Fig. 17); means for preparing an evaluation value of at least one of the shots included in each of the selected scenes on the basis of the information provided corresponding to a single or a plurality of video characteristic items of the shots, wherein the information provided corresponding to each of the shots includes semantic evaluation information and video characteristic items (Page 69, line 15page 71, line 1; Figs. 11, 22 and 24); means for selecting the shots such that each of the evaluation values of the shots satisfies a predetermined second condition (Prg 6 of Figure 11, Page 52, line15-Page 53, line 15); and means for coding the information of the recording position information or the time lapse information corresponding to each of the selected shots

and data including at least the shot evaluation value (VR in Figure 11, Page 60, line 7-Page 61, line14), wherein the first and second conditions are set in accordance with a type of preview, the type of preview being selected from a plurality of types of previews, which are set for different purposes (Page 64, lines 14-18).

Claim 65 is directed to a method for generating a preview from a video (Page 41, line 6-page 42, line 6) comprising the steps of accessing a segment of the video (Page 15, lines 15-21); establishing a plurality of shots from the segment of the video (Page 49, lines 5-Page 50, line 7); providing semantic evaluation information related to content of one or more of the plurality of shots (Page 49, lines 5-Page 50, line 7); evaluating a single or a plurality of video characteristics of one or more of the plurality of shots; selecting particular shots as a function of the semantic evaluation information and the single or plurality of video characteristics (Page 49, lines 5-Page 50, line 7); and generating the video by concatenating the selected particular shots such that the video has a predetermined time duration (Page 51, line 7-Page 52, line 10), wherein the selecting particular shots is performed using predetermined conditions associated with a type of preview, the type of preview being selected from a plurality of types of previews, which are set for different preview purposes (Page 64, lines 14-18).

Claim 66 is directed to an apparatus (Figure 11) for generating a preview from a video comprising means for accessing a segment of the video (vp in Figure 11); means for establishing a plurality of shots from the segment of the video (Prg1 in Figure 11); means for providing semantic evaluation information related to content of one or more of the plurality of shots (Ip2 in Figure 11); means for evaluating a single or a plurality of video characteristics of one or more of the plurality of shots; means for selecting particular shots as a function of the semantic evaluation information and the single or a plurality of video characteristics (Prg 6 of Figure 11);

and means for generating the video by concatenating the selected particular shots such that the video has a predetermined time duration (Prg 9 in Figure 11), wherein the selecting particular shots is performed using predetermined conditions associated with a type of preview, the type of preview being selected from a plurality of types of previews, which are set for different preview purposes (Page 64, lines 14-18).

Claim 76 is directed to a computer-readable medium (Page 61, lines 14-19) adapted to store a computer program for generating a preview from a video, comprising program code for accessing a segment of the video; program code for establishing a plurality of shots from the segment of the video (Page 15, lines 15-21); program code for providing semantic evaluation information related to content of one or more of the plurality of shots (Page 49, lines 5-Page 50, line 7); program code for evaluating a single or a plurality of video characteristics of one or more of the plurality of shots (Page 49, lines 5-Page 50, line 7); program code for selecting particular shots as a function of the semantic evaluation information and a single or a plurality of video characteristics (Page 49, lines 5-Page 50, line 7); and program code for generating video by concatenating the selected particular shots such that the video has a predetermined time duration (Page 49, lines 5-Page 50, line 7), wherein the selecting particular shots is performed using predetermined conditions associated with a type of preview, the type being selected from a plurality of types of previews, which are set for different preview purposes (Page 64, lines 14-18).

6. GROUNDS FOR REJECTION TO BE REVIEWED ON APPEAL

Claims 1 and 33 were rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent No. 5,917,990 to Zamara et al. Claims 9, 41-48, and 57 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 5,917,990 to Zamara, et al. in view of U.S. Patent No. 5,995,095 to Ratakonda.

Claims 65, 66, and 76 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,738,100 to Hampapur, et al. in view of U.S. Patent No. 5,995,095 to Ratakonda.

7. ARGUMENTS

Claims 1 and 33 were rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent No. 5.917.990 to Zamara et al.

Generally, Appellants submit that the Examiner has misinterpreted Zamara as describing claim recitations that are simply not disclosed in Zamara. The Examiner relies on column 3, lines 10-59 and column 4, lines 27-38 as a basis of rejection of claim 1.

Indeed, one example of the misinterpretation is that the Examiner relies on overlapping portions of Zamara to anticipate three different features recited in claim 1. For example, the Examiner relies on Zamara column 3, lines 14-47 as a basis of rejection of the claimed "preparing an evaluation value...." feature of claim 1 and column 3, lines 25-34 and 39-47 to reject the "semantic evaluation information" feature as well as the "presence/absence of a single or plurality of video characteristics" feature. Appellants submit that alleging similar portions of a reference anticipate different claim recitations is improper and that the Examiner has failed to show how the disclosure of Zamara renders claim 1 unpatentable.

Furthermore, Zamara does not anticipate claim 1 nor render claim 1 obvious.

Zamara describes calculation of scene detect data from a single frame of video by determining a luminance value of each pixel and an average luminance value. Determination of a luminance value, as described in Zamara, does not describe or suggest wherein the information provided includes semantic evaluation information, and wherein the information provided includes information relating to a presence/absence of a single or a plurality of video characteristic items, both recited in claim 1. Indeed, "semantic evaluation information" as recited in claim 1 is unrelated to determining a luminance value, as described in Zamara.

A more detailed analysis is provided below.

Claim 1 recites inter alia:

"...preparing an evaluation value of each of the shots or each of the scenes on the basis of the information provided corresponding to each of the shots or each of the scenes.

wherein the information provided includes semantic evaluation information,

wherein the information provided includes information relating to a presence/absence of a single or a plurality of video characteristic items...

...selecting from the regular edition video the shots or the scenes such that each of the evaluation values of the shots or the scenes satisfies a predetermined condition." (emphasis added)

As understood by Appellants, U.S. Patent No. 5,917,990 to Zamara et al.

(hereinafter, merely "Zamara") relates to a process that allows precise control of the tape
position in consumer videotape devices for the purpose of video editing. The process utilized

software to locate a specific video frame within the digitized video. The process involves storing an initial set of calculated scene data, which include luminance and change in luminance values

-12- 00554518

for each video frame. A second set of scene detection data is taken a reference point near the desired frame. The two values are compared and the videotape position is adjusted accordingly.

Appellants respectfully submit that nothing has been found in Zamara that would teach or suggest the above-identified feature of claim 1. Specifically, Appellants submit that Zamara fails to teach or suggest preparing an evaluation value of each of the shots or each of the scenes on the basis of the information provided corresponding to each of the shots or each of the scenes, wherein the information provided includes semantic evaluation information and wherein the information provided includes information relating to a presence/absence of a single or a plurality of video characteristic items, and selecting from the regular edition video the shots or the scenes such that each of the evaluation values of the shots or the scenes satisfies a predetermined condition, as recited in claim 1.

Appellants submit that the cited portions of Zamara, specifically col. 3, lines 25-34 and lines 39-47, disclose calculation of scene detect data from a single frame of video using an average frame luminance value.

Zamara, column 3, lines 21-47 states:

"[t]he calculation of the scene detect data from a single frame of video data first involves determining the luminance value for each pixel of low pass filtered video frame data and then determining the average frame luminance value by averaging all pixels in the filtered data. For example, using 8-bit luminance samples, there would be 256 possible brightness levels for each pixel in the video frame. Determining the luminance value for each pixel can be thought of as an extraction of a black and white scaled down version of a single video frame, and is independent of the video capture hardware and any data compression methods being employed. As an example of determining the luminance values from a video frame in a RGB format, the luminance for a pixel could be determined by the formula (R+G+B)/2. Determining the average frame luminance value is done by calculating a simple mean average of the luminance values of each single video frame, adding the value of all of the samples and dividing the result by the number of samples. This would result in an average frame luminance value for a particular frame. To determine the delta value of a frame, one would subtract luminance values from corresponding pixels in two consecutive frames, take the absolute value of the difference, i.e. making negative values positive, and calculate a simple mean average of all of these differences. The luminance and delta values for each frame of video are stored, for example, on a hard disk drive, for later use when one desires to find a specific tape position," (emphasis added)

Thus, Zamara describes determining the luminance value for each pixel of low pass filtered video frame data and then determining the average frame luminance value by averaging all pixels in the filtered data, which is based on an algorithm that results in an average frame luminance.

Appellants submit that determining a luminance value for each pixel of low pass filtered video frame data does not disclose "the information provided includes semantic evaluation information", as recited in claim 1. Moreover, determining a luminance value, as described in Zamara does not disclose that "the information provided includes information relating to a presence/absence of a single or a plurality of video characteristic items", and therefore, does not render claim 1 unpatentable.

The Examiner relies on Zamara column 3, lines 14-47 to anticipate "preparing an evaluation of each of the shots or each of the scenes on the basis of the information provided..." as recited in claim 1. However, Zamara, column 3, lines 14-47 describes determining the luminance value. (Portions of column 3, lines 14-47 (lines 21-47) have been reproduced above in the discussion of the other features of claim 1 since the Examiner relies on overlapping portions of Zamara as a basis to anticipate different claim elements.) Appellants submit that determination of a luminance values, as described in Zamara, does not pertain to preparing an evaluation of each of the shots or each of the scenes on the basis of the information provided, as recited in claim 1.

For all of the above reasons, claim 1 is patentable.

For reasons similar to those described above, independent claim 33 is also patentable. Claims 9, 41-48, and 57 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 5,917,990 to Zamara, et al. in view of U.S. Patent No. 5,995,095 to Ratakonda.

Claim 9 recites, inter alia:

"...wherein the first and second condition are set in accordance with a type of preview, the type of preview being selected from a plurality of types of previews, which are set for different purposes." (emphasis added)

As understood by Appellants, U.S. Patent No. 5,995,095 to Ratakonda (hereinafter merely "Ratakonda") relates to hierarchical digital video summarization and browsing that includes inputting a digital video signal for a digital video sequence and then generating a hierarchical summary based on keyframes of the video sequence.

Appellants respectfully submit that nothing has been found in Zamara or Ratakonda, taken alone or in combination, that would teach or suggest the above-identified features of claim 9. Appellants submit that the cited portions of Ratakonda, col. 3 lines 40-52 and col. 5, lines 48-55, relate to hierarchical multilevel summary of single frames. The cited portions of Ratakonda do not teach or suggest anything about conditions being set.

Appellants submit that such disclosure does not disclose "the first and second condition are set in accordance with a type of preview, the type of preview being selected from a plurality of types of previews, which are set for different purposes" and therefore, does not render claim 9 unpatentable.

Specifically, Appellants submit that Zamara and Ratakonda fail to teach or suggest that the first and second condition are set in accordance with a type of preview, the type of preview being selected from a plurality of types of previews, which are set for different purposes.

Therefore, claim 9 is patentable.

For reasons similar to those described above, independent claims 41 and 57 are patentable.

Claims 65, 66, and 76 were rejected under 35 U.S.C. §103(a) as allegedly upatentable over U.S. Patent No. 6,738,100 to Hampapur, et al. in view of U.S. Patent No. 5,995,095 to Ratakonda.

Claim 65 recites, inter alia:

"...wherein the selecting particular shots is performed using predetermined conditions associated with a type of preview, the type of preview being selected from a plurality of types of previews, which are set for different preview purposes."

As understood by Appellants, U.S. Patent No. 6,738,100 to Hampapur, et al. (hereinafter, merely "Hampapur") relates to processing video to extract a key-frame based adequate visual representation. A chromatic difference metric is extracted from a pair of video frames. An initial set of frames is chosen based the chromatic metric and a first threshold. A structural difference measurement is then extracted. A second threshold is used to select key frames from the initial set of frames. The output of this process is the visual representation.

Appellants respectfully submit that nothing has been found in Hampapur or Ratakonda, taken alone or in combination, that would teach or suggest the above-identified feature of claim 65.

Appellants submit that the cited portions of Ratakonda, col. 3 lines 40-52 and col. 5, lines 48-55, relate to hierarchical multilevel summary of single frames.

The cited portions of Ratakonda do not teach or suggest anything about using predetermined conditions associated with a type of preview to select particular shots and therefore, such disclosure does not render claim 65 unpatentable.

Specifically, Appellants submit that Hampapur and Ratakonda fail to teach or suggest that the selecting particular shots is performed using predetermined conditions associated with a type of preview, the type of preview being selected from a plurality of types of previews, which are set for different preview purposes. Therefore, claim 65 is patentable.

For reasons similar to those described above, independent claims 66 and 76 are also patentable.

The other claims in this application are each dependent from one of the independent claims discussed above and are therefore believed patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

-17- 00554518

CONCLUSION

For the reasons discussed above, claims 1, 9, 33, 41-48, 57, 65, 66 and 76 are patentable. It is, therefore, respectfully submitted that the Examiner erred in rejecting claims 1, 9, 33, 41-48, 57, 65, 66 and 76, and Appellant requests a reversal of these rejections by this Honorable Board. As a result, the allowance of this application should be mandated.

The Commissioner is hereby authorized to charge any additionally required fee, or to credit any overpayment in such fees, to Deposit Account No. 50-0320.

Respectfully submitted,

FROMMER LAWRENCE & HAUG, LLP

Attorneys for Appellant

Bv:

Thomas F. Presson Reg. No. 41,442 Tel (212) 588-0800

Fax (212) 588-0500

APPENDIX I

CLAIMS ON APPEAL

 (Previously Presented) A video information editing method comprising the steps of:

delimiting at timing of a delimiting instruction a regular edition video, constituted by continuous dynamic images recorded along with recording position information or time lapse information, into shots as units of dynamic images or into scenes each containing at least one shot with the recording position information or the time lapse information associated with the shots or scenes:

preparing an evaluation value of each of the shots or each of the scenes on the basis of the information provided corresponding to each of the shots or each of the scenes, wherein the information provided includes semantic evaluation information, and wherein the information provided includes information relating to a presence/absence of a single or a plurality of video characteristic items; and

selecting from the regular edition video the shots or the scenes such that each of the evaluation values of the shots or the scenes satisfies a predetermined condition.

2-8. (Canceled)

 (Previously Presented) A video information editing method comprising the steps of:

delimiting at timing of a delimiting instruction a regular edition video, constituted by continuous dynamic images recorded along with recording position information or time lapse information, into shots as units of dynamic images and into scenes each containing at least one shot with the recording position information or the time lapse information associated with the shots or scenes;

preparing a semantic evaluation value of each of the scenes on the basis of the information provided corresponding to each of the scenes;

selecting from the regular edition video the scenes such that each of the semantic evaluation values of the scenes satisfies a predetermined first condition;

preparing an evaluation value of at least one of the shots included in each of the selected scenes on the basis of the information provided corresponding to a single or a plurality of video characteristic items of the shots; and

selecting the shots such that each of the evaluation values of the shots satisfies a predetermined second condition,

wherein the first and second condition are set in accordance with a type of preview, the type of preview being selected from a plurality of types of previews, which are set for different purposes.

10-32. (Canceled)

33. (Previously Presented) A video information editing device comprising: means for delimiting at timing of a delimiting instruction a regular edition video, constituted by continuous dynamic images recorded along with recording position information or time lapse information, into shots as units of dynamic images or into scenes each containing at least one shot with the recording position information or the time lapse information associated with the shots or scenes;

means for preparing an evaluation value of each of the shots or each of the scenes on the basis of the information provided corresponding to each of the shots or each of the scenes, wherein the information provided includes semantic evaluation information, and wherein the information provided includes information relating to a presence/absence of a single or a plurality of video characteristic items; and

means for selecting from the regular edition video the shots or the scenes such that each of the evaluation values of the shots or the scenes satisfies a predetermined condition.

34-40. (Canceled)

41. (Previously Presented) A video information editing device comprising:

means for delimiting at timing of a delimiting instruction a regular edition video,
constituted by continuous dynamic images recorded along with recording position information or
time lapse information, into shots as units of dynamic images and into scenes each containing at
least one shot with the recording position information or the time lapse information associated
with the shots or scenes:

means for preparing a semantic evaluation value of each of the scenes on the basis of the information provided corresponding to each of the scenes;

means for selecting from the regular edition video the scenes such that each of the semantic evaluation values of the scenes satisfies a predetermined first condition;

means for preparing an evaluation value of at least one of the shots included in each of the selected scenes on the basis of the information provided corresponding to a single or a plurality of video characteristic items of the shots; and

means for selecting the shots such that each of the evaluation values of the shots satisfies a predetermined second condition,

wherein the first and second conditions are set in accordance with a type of preview, the type of preview being selected from a plurality of types of previews, which are set for different purposes.

- 42. (Original) The video information editing device as claimed in claim 41, further comprising means for, if the length of a video produced by connecting selected shots exceeds a predetermined video time, modifying at least one of the predetermined first condition and second condition and repeating the processing until the length of the video becomes equal to the predetermined video time.
- 43. (Previously Presented) The video information editing device as claimed in claim 41, wherein the predetermined first condition is that an absolute value of the scene evaluation value related to the scene reaches a predetermined threshold value, and

wherein with respect to an integration value of the evaluation value related to each of the scenes along the scene transition, the scene is a peak scene when the continuous increase of the integration value up to a scene exceeds a predetermined first gap value and the absolute value of the continuous decrease of the integration value after that scene exceeds a predetermined second gap value,

while the scene is a valley scene when the absolute value of the continuous decrease of the integration value up to a scene exceeds a predetermined third gap value and the continuous increase of the integration value after that scene exceeds a predetermined fourth gap value, and

the threshold value is determined for each area between the peak or valley scene and the adjacent valley or peak scene.

44. (Previously Presented) The video information editing device as claimed in claim 41, wherein with respect to an integration value of the evaluation value related to each of the scenes along the scene transition, the scene is a peak scene when the continuous increase of the integration value up to a scene exceeds a predetermined first gap value and an absolute value of the continuous decrease of the integration value after that scene exceeds a predetermined second gap value,

while the scene is a valley scene when the absolute value of the continuous decrease of the integration value up to a scene exceeds a predetermined third gap value and the continuous increase of the integration value after that scene exceeds a predetermined fourth gap value, and

the predetermined first condition is applied to the scenes on the upward slope to the peak from the adjacent valley before the peak and the scenes on the downward slope immediately after the peak, on the basis of the magnitude of the increase of the integration value of the valley scene and the adjacent peak scene after the valley, or on the basis of the ranking of the magnitude of the increase of the integration value.

- 45. (Original) The video information editing device as claimed in claim 43, wherein the predetermined first condition is that the absolute value of the scene evaluation value related to the scenes reaches a predetermined threshold value, and the threshold value is set in accordance with the upward slope from the valley to the adjacent peak or the downward slope from the peak to the adjacent valley.
- 46. (Original) The video information editing device as claimed in claim 43, wherein the predetermined first condition is that the absolute value of the scene evaluation value related to the scenes reaches a predetermined threshold value, and when each of the evaluation values is formed by a positive or negative value, the absolute value of the threshold value applied to the positive evaluation value is made equal to or smaller than the absolute value of the threshold value applied to the negative evaluation value.
- 47. (Original) The video information editing device as claimed in claim 41, wherein the shot evaluation value is a value obtained by adding a value obtained by carrying out predetermined weighting on each of the video characteristic items including at least the presence of a speech, the volume of a predetermined level or higher, the appearance of a specified actor/actress, or the special picture effect in the corresponding part of the regular edition video, with respect to each of the items.
- 48. (Original) The video information editing device as claimed in claim 47, wherein with respect to the shot evaluation value, the weighting value on the item related to the

A-6 00554518

appearance of a specified actor/actress is made greater than the weighting values on the other items

49-56. (Canceled)

57. (Previously Presented) A video information editing device comprising: means for delimiting at timing of a delimiting instruction a regular edition video, constituted by continuous dynamic images recorded along with recording position information or time lapse information, into shots as units of dynamic images and into scenes each containing at least one shot with the recording position information or the time lapse information associated with the shots or scenes:

means for preparing a semantic evaluation value of each of the scenes on the basis of the information provided corresponding to each of the scenes;

means for selecting from the regular edition video the scenes such that each of the semantic evaluation values of the scenes satisfies a predetermined first condition;

means for preparing an evaluation value of at least one of the shots included in each of the selected scenes on the basis of the information provided corresponding to a single or a plurality of video characteristic items of the shots,

wherein the information provided corresponding to each of the shots includes semantic evaluation information and video characteristic items:

means for selecting the shots such that each of the evaluation values of the shots satisfies a predetermined second condition; and

A-7 00554518

means for coding the information of the recording position information or the time lapse information corresponding to each of the selected shots and data including at least the shot evaluation value,

wherein the first and second conditions are set in accordance with a type of preview, the type of preview being selected from a plurality of types of previews, which are set for different purposes.

58-64. (Canceled)

65. (Previously Presented) A method for generating a preview from a video comprising the steps of:

accessing a segment of the video;

establishing a plurality of shots from the segment of the video;

providing semantic evaluation information related to content of one or more of the plurality of shots;

evaluating a single or a plurality of video characteristics of one or more of the plurality of shots;

selecting particular shots as a function of the semantic evaluation information and the single or plurality of video characteristics; and

generating the video by concatenating the selected particular shots such that the video has a predetermined time duration,

A-8 00554518

wherein the selecting particular shots is performed using predetermined conditions associated with a type of preview, the type of preview being selected from a plurality of types of previews, which are set for different preview purposes.

66. (Previously Presented) An apparatus for generating a preview from a video comprising:

means for accessing a segment of the video;

means for establishing a plurality of shots from the segment of the video;

means for providing semantic evaluation information related to content of one or more of the plurality of shots:

means for evaluating a single or a plurality of video characteristics of one or more of the plurality of shots:

means for selecting particular shots as a function of the semantic evaluation information and the single or a plurality of video characteristics; and

means for generating the video by concatenating the selected particular shots such that the video has a predetermined time duration,

wherein the selecting particular shots is performed using predetermined conditions associated with a type of preview, the type of preview being selected from a plurality of types of previews, which are set for different preview purposes.

67-75. (Canceled)

A-9 00554518

76. (Previously Presented) A computer-readable medium adapted to store a computer program for generating a preview from a video, comprising:

program code for accessing a segment of the video;

program code for establishing a plurality of shots from the segment of the video; program code for providing semantic evaluation information related to content of

one or more of the plurality of shots;

program code for evaluating a single or a plurality of video characteristics of one or more of the plurality of shots;

program code for selecting particular shots as a function of the semantic evaluation information and the a single or a plurality of video characteristics; and

program code for generating video by concatenating the selected particular shots such that the video has a predetermined time duration,

wherein the selecting particular shots is performed using predetermined conditions associated with a type of preview, the type being selected from a plurality of types of previews, which are set for different preview purposes.

APPENDIX II

EVIDENCE

None

A-11 00554518

APPENDIX III

RELATED PROCEEDINGS

None